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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,304	05/10/2001	Chan Kim	11349-P66638US0	4724
43569	7590	03/27/2006	EXAMINER	
MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			MURPHY, RHONDA L	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,304

Applicant(s)

KIM ET AL.

Examiner

Rhonda Murphy

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-17 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) 3-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Claims 10-17 have been newly added and claims 1-17 are currently pending in this application. Upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference.

Claim Objections

1. Claim 3 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 10. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Regarding claims 1 and 10, line 4, the word "means" is preceded by the word(s) "an external" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the

element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa (US 6,665,315) in view of Wright et al. (US 6,411,410).

Regarding claim 1, Karasawa teaches a cell receiving means (Fig. 3, receiving unit 20) for receiving an ATM cell from the PON downstream data (col. 4, lines 49-51) and transferring an ATM cell through a receiving interfacing means to an external means (col. 4, lines 49-63; the cell is received by receiving unit 20 and transferred to the cell detection unit 21) and transferring a message in a PLOAM (Physical Layer Operation and Maintenance) cell to a message processing means (col. 4, lines 55-59); a cell transmitting means (Fig. 3, transmitting unit 28) for transmitting the ATM cell received through a transmitting UTOPIA interfacing means in a granted slot (col. 3, lines 66-67; col. 4, lines 1-10; granting slots for ATM cell transmission is known in the art) and transferring in upstream by loading the message being on standby in payload of the PLOAM cell when the PLOAM cell is transmitted (col. 5, lines 20-29); and the message processing means (Fig. 3, message analysis unit 24) for setting internal signals by

processing the received message or instructing operation of a plurality of functional blocks (col. 5, lines 5-8; "reads and analyzes the messages...sets the delay value in the delaying unit 27"), and transferring the message requested by the plurality of functional blocks through the cell transmitting means (see Fig. 3, the path from delaying unit 27 to transmitting unit 28).

Karasawa fails to explicitly disclose a utopia interfacing means.

However, official notice is taken in that utopia interfacing means in ATM systems are well known in the art for testing and operation purposes.

Therefore, it would have been obvious to one skilled in the art to include a utopia interfacing means in order to perform tests and operation functions, thus providing a more reliable system.

Although Karasawa fails to explicitly disclose demultiplexing, Karasawa teaches extracting downstream PLOAM cells from the cell stream output (col. 4, lines 55-56). Furthermore, Wright teaches a demultiplexer for extracting cells (Fig. 19; col. 15, line 65).

Therefore, it would have been obvious to one skilled in the art to transfer a message in a PLOAM cell by demultiplexing, in order to extract the PLOAM cell from the data stream.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa as applied to claim 1 above, and further in view of Yuki (US 6,778,557).

Regarding claim 2, Karasawa teaches a cell transmitting means.

Karasawa fails to teach an enable signal for mini-slot payload and receiving mini-slot payload bytes and sending them upstream on the mini-slot for using an arbitrary mini-slot report format.

However Yuki teaches an enable signal for mini-slot payload and receiving mini-slot payload bytes and sending them upstream on the mini-slot for using an arbitrary mini-slot report format (col. 27, lines 5-25).

In view of this, it would have been obvious to one skilled in the art to modify Karasawa's system, by enabling data loaded in a mini-slot to output an enable signal, so as to improve communications efficiency and reduce buffer memory requirements (col. 29, lines 31-33).

Allowable Subject Matter

5. Claims 10-17 are allowed.
6. Claims 3-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments, filed 2/13/06, with respect to the rejection(s) of claim(s) 1-9 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy
Examiner
Art Unit 2667

RM



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SUPERVISORY PATENT EXAMINER
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